

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F3/033

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, IBM-TDB, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 987 616 A (PENNY & GILES COMPUTER PRODUCT) 22 March 2000 (2000-03-22) paragraph [0006] - paragraph [0009] paragraph [0018] paragraph [0026]; figures -----	1,2,18, 19
E	WO 03/065194 A (TAMAGAWA SEIKI CO LTD ; HAMA NOBUHARU (JP); NAKAYAMA KIICHI (JP)) 7 August 2003 (2003-08-07) the whole document -----	1,2,6
E	WO 03/069460 A (TAMAGAWA SEIKI CO LTD ; HAMA NOBUHARU (JP)) 21 August 2003 (2003-08-21) the whole document ----- -/-	1,2,6

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

4 May 2004

Date of mailing of the international search report

17.06.2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Durand, J

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 03/00869

C.(Continuation) DOCUMENTS CONSIDERED RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 573 018 A (SYMBOL TECHNOLOGIES INC) 8 December 1993 (1993-12-08) column 6, line 18 - line 21 column 9, line 25 - line 37; figures 1-3 -----	1,2,5
A	US 4 404 865 A (KIM SNYG N) 20 September 1983 (1983-09-20) column 6, line 17 - line 23; figure 3 -----	8
A	US 5 288 993 A (ARREGUIT JAVIER ET AL) 22 February 1994 (1994-02-22) the whole document -----	1

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INTERNATIONAL SEARCH REPORT

International Application No.
PCT/03/00869

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: 38 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-10, 18, 19

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 38

The wording of claim 38 presently on file renders it impossible to determine the matter for which protection is sought. The present application fails to comply with the clarity and conciseness requirements of Article 6 PCT (see also Rule 6.2(a) PCT) to such an extent that a meaningful search is impossible. Consequently, the search has been restricted to those parts of the application which do appear to be clear and concise, namely claims 1 to 37.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10, 18, 19

trackball wit sealed component chamber

2. claims: 11-17, 20-37

trackball with optical sensors mounted at an angular position relatively to the ball diameter normal to the mounting plane

Information on patent family members

PCT/GB 03/00869

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 0987616	A	22-03-2000	GB EP	2341439 A 0987616 A2		15-03-2000 22-03-2000
WO 03065194	A	07-08-2003	WO	03065194 A1		07-08-2003
WO 03069460	A	21-08-2003	WO	03069460 A1		21-08-2003
EP 0573018	A	08-12-1993	CA DE DE EP JP US US US US US	2097360 A1 69331614 D1 69331614 T2 0573018 A2 6096255 A 5369262 A 5536930 A 5508504 A 5633489 A 5656804 A		04-12-1993 04-04-2002 31-10-2002 08-12-1993 08-04-1994 29-11-1994 16-07-1996 16-04-1996 27-05-1997 12-08-1997
US 4404865	A	20-09-1983	AU CA EP JP ZA	1128183 A 1192285 A1 0085960 A1 58149535 A 8300910 A		18-08-1983 20-08-1985 17-08-1983 05-09-1983 28-03-1984
US 5288993	A	22-02-1994	AU CA DE ES FR GB IT JP NL US US US US US US US US US US US	4881993 A 2107743 A1 4333992 A1 2079288 A2 2696566 A1 2271847 A ,B 1262566 B 6195168 A 9301709 A 6225617 B1 6084574 A 6124587 A 6031218 A 5703356 A 6218659 B1 5729009 A 5578817 A 5907152 A		21-04-1994 06-04-1994 19-05-1994 01-01-1996 08-04-1994 27-04-1994 04-07-1996 15-07-1994 02-05-1994 01-05-2001 04-07-2000 26-09-2000 29-02-2000 30-12-1997 17-04-2001 17-03-1998 26-11-1996 25-05-1999

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